

Policy: Close notes; close book; no cell phone use during the exam; one formula sheet is allowed; calculator is allowed; work on provided exam sheets only; addition papers can be requested.

Duration: 80minutes (10/16/06 5:30-6:50pm)

Preparation:

1. **Problem exercise section:** 10/11/2006 5:30-6:50pm  
TA will work through Problems 1-28, 2/23/24, 4-84, 5-71, 6-21 and example 5.2
2. **Additional office hours:** Monday 2-5:00pm at WH315J. If you can not make to the office hour, contact the TA at [eunyoung.kim@uta.edu](mailto:eunyoung.kim@uta.edu) to make an appointment
3. All course notes and homework solutions are available at WebCT under course contents
4. **Example topics** (chapter 1-5, section 6.1, 6.2)
  - a. Free-body diagram
  - b. Stresses (average normal stress, average shear stress, general state of stresses)
  - c. Design criteria (allowable stress, factor of safety, stress concentration factor)
  - d. Deformation & strain
  - e. Mechanical properties of material (stress-strain curve, identification of material properties from stress-strain curve, identification of difference material behaviors from the stress-strain curve,)
  - f. Deformation of axially loaded member
  - g. Statically indeterminate members (tension, shear, thermal stress)
  - h. Torsional stress/deformation
  - i. Shear & moment diagram